

hp vectra xe310



proven technology PCs at the best price the most affordable business PC from HP

- **peace of mind:** At HP we know that your business may depend on your PCs. To ensure maximum uptime, we build our systems using the most stringent, and constantly optimized, quality processes. When buying an HP essential line PC, you can rest assured that you have a high-quality product from a company you can trust.
- **support anywhere at anytime:** In the unlikely event of a problem, you can rely on HP support to quickly put you back on track. With the Web-enabled support tools, e-Diagtools 3.5 and HP Instant Support, you can automatically diagnose and fix many computer problems. Further, if your problem persists, you can contact an HP support specialist and with one mouse click, your case history will be transferred so you won't have to retell your story.
- **essential features to meet core computing needs:** It is easy to select and order configurations that are optimized for common business use.

the hp vectra xe310

- **entry-level Intel® processors:** Based on Intel processors and chipset, the HP Vectra xe310 will meet your budget and computing needs.

essential line PC



Intel 810E chipset

- integrated Intel 815E graphics
- integrated (AC '97) audio

built-in I/O

- one 25-pin parallel port
- one 9-pin serial port
- two PS/2 connectors
- two USB ports
- one 15-pin VGA
- one MIDI/joystick port
- audio and mic ports

expansion slots

- three PCI slots

OS support

- Microsoft Windows 98 SE
- Microsoft Windows 2000 certified



highly serviceable new stylish design

- expandable but compact design
- toolless internal access
- easy access to upgradable parts

mass storage shelves (5)

- one 3.5" FDD
- two 5.25" front accessible shelves
- two internal for standard, 1/3 height 3.5" HDD (one preinstalled)

memory

- 64, 128, or 256 MB 133 MHz synchronous DRAM (non-ECC) (memory runs at 100 MHz)
- expandable to 512 MB through two memory sockets

at a glance

new technology highlights

- Intel Pentium® III 1 GHz processor with 256 KB level-2 integrated cache
- Intel Celeron™ 900 MHz to 1.1 GHz processor with 128 KB level-2 integrated cache
- 64 MB, 128 MB, or 256 MB SDRAM memory
- 20 GB or 40 GB Ultra ATA/66 hard disk storage
- HP 48X max-speed CD-ROM drive
- HP 16X max-speed IDE CD-RW drive¹
- HP 16X MultiRead DVD-ROM drive (selected countries only)
- Intel 810E chipset-integrated graphics direct AGP and AC '97 audio controller
- Microsoft® Windows® 98 Second Edition preloaded
- 56 Kbps external USB (or internal PCI in US) modem on selected models
- HP 10/100Base-T LAN card on selected models
- Integrated CrystalClear high-quality AC '97 audio
- Desktop Management Interface (DMI) 2.0 compliant and Wired for Management (WfM) 2.0 upgradable²
- Advanced Power Management (APM) 1.2 and Advanced Configuration and Power Interface (ACPI) 1.0b compliant

¹ Available in selected countries

² For models with LAN only

HP PCs use genuine Windows® Operating Systems
www.microsoft.com/piracy/howtotell

configurations and models

product number	form factor	processor	cache	memory (standard/max.)	hard disk	optical storage	audio	graphics RAM	video/modem	LAN system	operating
P5880B	Microtower	Celeron 950 MHz	128KB	128/512 MB SDRAM	20 GB	48x CD-ROM	Int. AC '97	Intel 810e	shared	10/100 LAN	Windows 98
P6136T	Microtower	Celeron 1 GHz	128KB	128/512 SDRAM	20 GB	48x CD-ROM	Int. AC '97	Intel 810e	shared	10/100 LAN	Windows 98
P6132T	Microtower	Celeron 1 GHz	128KB	128/512 SDRAM	20 GB	16x CD-RW	Int. AC '97	Intel 810e	shared	10/100 LAN	Windows 98

monitors

HP has the right monitor for you at the right price. Detailed information is available at: www.hp.com/go/monitors

	commercial name	hp part number	CRT size/ VIS*	dot/pixel pitch	recommended resolution/ max resolution (@xxHz)	horizontal frequency
CRT monitors						
15" essential	hp 56	P4795A	15.0 in. 13.8 in. viewable area	0.28 mm	800 x 600 @ 85 Hz 1024 x 768 @ 60 Hz	30-54 kHz
17" essential	hp 72	D8904A	17.0 in. 15.9 in. viewable area	0.27 mm	1024 x 768 @ 85 Hz 1280 x 1024 @ 60 Hz	30-70 kHz
17" professional (flat CRT)	hp p720	D8907A	17.0 in. 16.0 in. viewable area	0.25 mm	1024 x 768 @ 85 Hz 1280 x 1024 @ 75 Hz	30-85 kHz
19" essential	hp 91	D8911A	19.0 in. 18.0 in. viewable area	0.26 mm	1280 x 1024 @ 85 Hz 1600 x 1200 @ 75 Hz	30-95 kHz
19" professional (flat CRT)	hp p920	D8912A	19.0 in. 18.0 in. viewable area	0.24 mm	1280 x 1024 @ 85 Hz 1920 x 1440 @ 70Hz	29-107 kHz
21" professional (flat CRT)	hp p1130	P4819A	21.0 in. 19.8 in. viewable area	0.24 mm	1600 x 1200 @ 85 Hz 2048 x 1536 @ 85Hz	30-130 kHz
LCD monitors						
15" professional	hp l1520	D5063A D5063M	15.0 in. 15.0 in. viewable area	N/A	1024 x 768 @ 60 Hz 1024 x 768 @ 75 Hz	N/A
17" professional	hp l1720	D5064M	17.0 in. viewable area	N/A	1280 x 1024 @ 60 Hz 1280 x 1024 @ 60 Hz	N/A
18" professional	hp l1820	D5960A	18.0 in. 18.1 in. viewable area	N/A	1280 x 1024 @ 60 Hz 1280 x 1024 @ 85 Hz	N/A

*viewable image size

Go to the HP monitor advisor tool at: www.hp.com/go/monitors and select "Help me choose my HP monitor" for assistance in choosing the appropriate HP monitor. When selecting a monitor, you should take into consideration the main application running on your PC, as well as any other criteria such as cost or space requirements.

accessories and services

hp vectra xe310 accessories

memory

P1538A	HP 256 MB non-ECC 133 MHz SDRAM
P1537A	HP 128 MB non-ECC 133 MHz SDRAM
P5102A	HP 256 MB non-ECC 133 MHz SDRAM (bulk pack of ten)
P5101A	HP 128 MB non-ECC 133 MHz SDRAM (bulk pack of ten)
P5100A	HP 64 MB non-ECC 133 MHz SDRAM (bulk pack of ten)

networking

D7508C	HP 10/100BT PCI LAN card
D7522B	HP 3Com Fast Etherlink 3C905C-TX PCI NIC

removable storage

D9444A	HP 48X max-speed IDE CD-ROM drive
P1543A	HP 16X/10X/40X max-speed IDE CD-RW drive
P1544B	HP 16X DVD-ROM

audio and multimedia

P1534A	HP external amplified speakers (9.6-watt RMS)
P1535A	HP multimedia monitor base (audio speakers in CRT monitor base)
P1978A	HP USB PC Web camera
P1968A	HP stereo headset with microphone

communication accessories

P1979A	HP 56K V90 external USB e-modem
P5091A	HP PCI internal modem (U.S. only)

input devices

C4736B	HP PS/2 scrolling mouse
C4735B	HP PS/2 Windows keyboard
C4766A	HP USB optical scrolling mouse
C4768A	HP USB Internet keyboard

service and support

warranty

- One year: Next Business Day Onsite*
- First years: Next Business Day Onsite. Second and third years: return to bench*
- First year: Next Business Day Onsite. Second and third years: free parts exchange*

support

- 24 hours a day, 7 days a week, there is always a way to reach the HP desktop PC support Web site:
- Industry-leading technical support program:
 - One-year free phone support from HP's Customer Care Center for questions related to bundled hardware
 - 30 days free start-up phone support for questions on setup and configuration of HP preloaded software
 - HP image creation and recovery CD-ROM provides leading suite of self-support features, including easy system recovery, powerful hardware diagnostics, direct access to driver installation packages
- HP award-winning support teams:
 - 24 hours a day/7 days a week free phone support in the U.S.

For more information, go to www.hp.com/go/vectrasupport and click on Assistance to find the telephone number of the HP Customer Care Center near you.

* Note: availability of options varies by country.

In an effort to provide customers predictable cost structures and business efficiency gain, HP offers a comprehensive set of services, including HP Consulting, HP Outsourcing, HP Support, HP Education, and HP Finance. To find more information go to the HP Services Web site at www.hp.com/hps/.

PC system features

processor	<ul style="list-style-type: none">• Intel Pentium III 1 GHz processor¹• Intel Celeron 900 MHz to 1.1 GHz processor
chipset	<ul style="list-style-type: none">• Intel 810E chipset with integrated graphics and AC '97 audio controller• 66 MHz, 100 MHz, or 133 MHz system bus
cache	<ul style="list-style-type: none">• 32 KB level-1 internal to processor• 128 KB level-2 internal to processor (Celeron)• 256 KB level-2 internal to processor (Pentium)
memory	<ul style="list-style-type: none">• 64 MB, 128 MB, or 256 MB PC133* non-ECC SDRAM standard memory:<ul style="list-style-type: none">– Expandable to 512 MB through two industry-standard DIMM slots* Note: PC133 memory is installed but runs at 100 MHz
hard disk drive	<ul style="list-style-type: none">• 20 GB or 40 GB Ultra ATA/66 hard disk storage• Up to 66 MB/s data transfer rate
hard disk controller	<ul style="list-style-type: none">• PCI Bus Master Ultra ATA controller with PIO Mode 4, DMA Mode 2, and Ultra DMA Mode 2 support
floppy disk drive	<ul style="list-style-type: none">• Third-height, 3.5-inch, 1.44 MB floppy disk drive preinstalled
optical storage	<ul style="list-style-type: none">• HP 48X max-speed IDE CD-ROM drive• HP 16X max-speed IDE CR-RW drive¹• HP 16X MultiRead DVD-ROM drive (selected countries only)
package	<ul style="list-style-type: none">• Compact microtower model• HP Windows keyboard• HP scrolling mouse (for easy navigation and Web browsing)
mass storage shelves	<ul style="list-style-type: none">• One front-accessible with standard, third-height, 3.5-inch floppy disk drive preinstalled• Two front-accessible for standard, half-height, 5.25-inch devices• Two internal for standard, third-height, 3.5-inch devices (hard disk drive preinstalled in one)
total expansion slots	<ul style="list-style-type: none">• Five shelves: one occupied by preinstalled hard disk drive• Three PCI slots
audio subsystem	<ul style="list-style-type: none">• Integrated CrystalClear high-quality AC '97 audio• DirectX support• Sound Blaster emulation• 18-bit stereo digital audio recording and playback; full duplex• Integrated digital FM synthesizer and plug-and-play interface• 64-voice Wavetable synthesis
ports	<ul style="list-style-type: none">• One 25-pin parallel port (ECP/EPP bi-directional Centronics supporting IEEE 1284)• One 9-pin serial port (16550 UART)• Mini-DIN keyboard and mouse ports• Two Universal Serial Bus (USB) ports• One 15-pin VGA connector• MIDI/joystick port, stereo input and output jacks, mono microphone input jack
communications	<ul style="list-style-type: none">• External 56 Kbps USB modem on selected models• Internal 56 Kbps modem on selected models (U.S. only)• Data transfer rates up to 56 Kbps and faxes up to 14.4 Kbps
keyboard	<ul style="list-style-type: none">• Standard PS/2 keyboard
mouse	<ul style="list-style-type: none">• PS/2 scrolling mouse
upgradability	<ul style="list-style-type: none">• Memory upgradable using SDRAM 133 MHz non-ECC DIMMs** Note: PC133 memory is installed but runs at 100 MHz
hp e-diagtools	<ul style="list-style-type: none">• Version 3.5

¹Available in selected countries

PC system features (continued)

physical characteristics	<ul style="list-style-type: none"> • system <ul style="list-style-type: none"> – dimensions (without keyboard) – weight (without keyboard & display) • keyboard <ul style="list-style-type: none"> – dimensions (standard) • footprint 	<p>metric</p> <p>37.0 cm deep x 21.0 cm wide x 37.0 cm high</p> <p>10.0 kg</p> <p>18.1 cm deep x 45.8 cm wide x 3.8 cm high</p> <p>0.77 m²</p>	<p>non-metric</p> <p>14.4 in. deep x 8.3 in. wide x 14.4 in. high</p> <p>21.6 lb</p> <p>7.1 in deep x 18.1 in wide x 1.5 in high</p> <p>0.83 sq ft</p>	
	environmental conditions	<ul style="list-style-type: none"> • temperature <ul style="list-style-type: none"> – operating – non-operating • humidity <ul style="list-style-type: none"> – operating 	<p>5° to 35°C</p> <p>–40° to 70°C</p> <p>15% to 80% RH (noncondensing) at 26°C</p>	<p>41° to 95°F</p> <p>–40° to 158°F</p> <p>15% to 80% RH (noncondensing) at 78.8°F</p>
	electrical characteristics	<ul style="list-style-type: none"> • input voltage <ul style="list-style-type: none"> – power supply: switch-selectable worldwide – frequency • power consumption—Windows 98 <ul style="list-style-type: none"> – sleep – idle • power availability 	<p>100–127 VAC or 200–240 VAC</p> <p>50 Hz/60 Hz</p> <p>25 W</p> <p>35 W</p> <p>continuous 70 W</p>	
acoustic emission	<ul style="list-style-type: none"> • pressure (LpA) at operator position (ISO 7779) 	<p>typical <31 dB (A)</p>		

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flexible

graphics subsystem

video graphics

- Intel 815E integrated graphics with Dynamic Video Memory technology (DVMT)
- 230 MHz RAMDAC
- DDC2B support for Plug-and-Play detection of monitor
- Basic DVD/MPEG-2 playback

Note: This integrated graphics solution is automatically deselected when an AGP graphics card is installed in the system.

graphics memory

- Dynamic allocation of system memory from 7 to 13 MB
- Enhanced performance module known as graphics performance accelerator GPA module (fits in AGP slot, 4 MB in size)

available graphics drivers

- HP-tested Microsoft Windows XP Professional
- HP-tested Microsoft Windows XP Home Edition
- HP-tested Microsoft Windows 2000 Professional
- HP-tested Microsoft Windows NT Workstation 4.0
- HP-tested Microsoft Windows 98 Second Edition

Drivers may be preloaded or available from HP desktop PC support Web site: www.hp.com/go/vectrasupport

recommended resolution

- 24-bit: 1024 x 768 at 85 Hz

minimum resolution

- 8-bit: 640 x 480 at 60 Hz

maximum resolution

- 24-bit: 1280 x 1024 at 85 Hz

software

operating system

- **HP supported operating system:**
Microsoft Windows 98 Second Edition
- **Other certified operating systems:**
Microsoft Windows 2000, Linux distributions: Mandrake 8.0*, Red Hat, Turbolinux, Caldera, and SuSE

More information about the Linux operating system is available on the HP desktop PC Web site: www.hp.com/desktops/linux

* Note: This software is shipped in the box. Its availability may vary per country.

provided software

- Microsoft Internet Explorer 5.0
- HP image creation and recovery CD-ROM
- HP e-Diagtools 3.5 (hardware diagnostics)
- Microsoft Office XP SBE (U.S. and Europe only) (available for companies with less than 400 employees)

available application software

- Microsoft Office XP SBE (U.S. only). It should be noted that this software is not provided.

HP PCs use genuine Windows® Operating Systems
www.microsoft.com/piracy/howtotell

communication features

modem	<ul style="list-style-type: none">• External 56 Kbps USB modem on selected models• Internal 56 Kbps modem on selected models (US only)• Data transfer rates up to 56 Kbps and faxes up to 14.4 Kbps
Ethernet LAN interface	<ul style="list-style-type: none">• HP 10/100Base-T PCI network card on selected models
internet ready	<ul style="list-style-type: none">• Microsoft Internet Explorer 5.0• HP scrolling mouse (for easy navigation and web browsing)
available LAN drivers	<ul style="list-style-type: none">• Windows 98 Second Edition, Windows 2000 Professional and Linux
other tested LAN cards	<ul style="list-style-type: none">• Detailed setup instructions and HP-tested drivers for a wide range of LAN cards are available on the HP desktop support Web site at: www.hp.com/go/vectrasupport

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ergonomics

ergonomic and environmental design	<ul style="list-style-type: none">• Ergonomic video modes supporting non-interlaced resolutions up to 1280 x 1024 and refresh rates up to 85 Hz• Battery system saves setup time• Advanced Power Management (APM) 1.2 and Advanced Configuration and Power Interface (ACPI) 1.0b compliant• Designed for Microsoft Windows 98 Second Edition and Windows 2000 Logo Program certification
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regulatory compliance and approvals

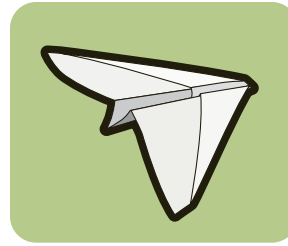
safety approvals

- IEC 60950: 1991 +A1 +A2 +A3 +A4
- 73/23/EEC Low Voltage Directive amended by Directive 93/68/EEC
- EN 60950: 1992 +A1 +A2 +A3 +A4 +A11
- CSA C22.2 No. 950-M89
- UL 1950 listed
- NOM-019-SCFI-1994
- GB4943-1995
- TÜV-GS Mark
- PSB

electromagnetic compatibility

- FCC part 15 class B
- ICES-003/NMB-003 Class B
- European EMC Directive 89/336/EEC amended by Directive 93/68 EEC
- VCCI Class B
- RRL Class B
- AS.NZS3548 Class B
- BSMI CNS13438 Class B
- CISPR 22: 1997 Class B, EN 55022: 1998
- CISPR 24: 1997 Class B, EN 55024: 1998
- GB9254-1998
- IEC/EN 61000-3-2: 1995 + A14
- IEC/EN 61000-3-3: 1995

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easy

hp value-added software

easy to support

HP essential line PCs are easy to diagnose, troubleshoot, and service so they provide a better user experience.

e-diahtools

HP e-Diahtools hardware diagnostics solution

- Provides preboot diagnostics, system configuration diagnostics, and a complete test suite of the system hardware components
- Immediate troubleshooting of e-Diahtools error codes can also be accessed manually or automatically (through HP virtual call assistant) from www.hp.com/desktops/diahtools
- Test results and system configuration are stored in a support ticket file for further access from your HP support provider, if necessary
- e-Diahtools allows the user to e-mail the support ticket to an HP support provider (in cases where the user's PC can access the Web)
- e-Diahtools can be remotely launched by HP Tootools device management software (requires HP Tootools agent on your system) or HP Instant Support web portal, or upon HP support specialist request
- e-Diahtools allows the user to update the system BIOS via their Internet connection (in cases where the user's PC can access the Web)

ease of setup and servicing

Highly serviceable packages-easy to open, repair, and expand, with built-in intuitiveness

- Features include:
 - Cover-tool-free, intuitive removal
 - System board-direct access to upgradable parts (memory, microprocessor, I/O cards)
 - Hard disk drive-easy removal, direct access, tool-free removal of hard disk drive cage
 - Front-accessible drives-direct access, easy removal of tray
 - No mounting accessories needed when installing accessory devices
 - Color-coded connectors for simplified PC assembly

instant support

HP instant support automates and speeds up the resolution of computing problems, freeing you from time-consuming diagnostic chores and allowing you to focus on more important business activities. Featuring Web-based diagnosis, resolution capabilities, and communication with HP support providers via active messaging, HP instant support can be personalized to meet your business needs and deliver the support experience that works for you. For more information, go to: www.hp.com/go/instant-support

More details on HP professional line PCs' supportability can be obtained at: www.hp.com/go/pcsupportability

Whatever your business need, HP has the monitor for you.
Optimized for your HP desktop PCs, HP monitors deliver the
performance you need and the quality you expect, at the
right price.

www.hp.com/go/monitors

For the latest information on HP essential line PCs,
visit HP's Web site at:

www.hp.com/go/desktops





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All certifications may not be completed at product introduction. Please check with your HP reseller for certification status.

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